ATTACHMENT 3

To: Water Use Efficiency Subcommittee
From: Bennett Brooks
Subject: WUE Program Plan
Date: February 18, 2005

Attached are materials to support the WUE Subcommittee's discussion of the Water Use Efficiency Program Plan. Specifically, please find attached both the WUE Program Plan and a supporting document that lays out WUE funding by agency, source and activity.

The Program Plan will be a major focus of the Subcommittee's discussions at its meeting Wednesday. We ask that you carefully review this material in advance of the meeting and come prepared to pose question or offer comments.

We look forward to seeing you Wednesday.

California Bay-Delta Program

Water Use Efficiency Program
Multi-Year Program Plan (Years 6-9)

Implementing Agencies:
Department of Water Resources
State Water Resources Control Board
United States Bureau of Reclamation
Natural Resources Conservation Service

February 18, 2005

CALIFORNIA
BAY-DELTA
AUTHORITY

Goals, Objectives, and Targets

Goals and Objectives

The goal of the Water Use Efficiency (WUE) Program is to advance the implementation of cost-effective water conservation and recycling practices throughout the State that contribute to California Bay-Delta Program water supply reliability, water quality, and ecosystem restoration goals. These practices include agricultural water conservation, urban water conservation, water recycling, and wetlands water management.

The CALFED Record of Decision (ROD) (pages 59-64) identified several WUE commitments which fall into four broad implementation categories (WUE Program Plan, 2000):

- **Assurances, Science, Monitoring, and Evaluation**
  - Provide credible assurances to policy-makers and stakeholders that the WUE Program is being implemented aggressively and in accordance with the ROD. Assurances are structured to ensure that appropriate efficiency measures are implemented. These assurances include limiting access to CALFED benefits and conditions on new storage facilities.
  - Support and inform sound water management decisions.
  - Verify results of WUE actions.

Develop quantified performance measures (including agricultural quantifiable objectives).

  - Engage in adaptive management.

- **Water Conservation and Recycling Loans and Grants**
  - Facilitate implementation of WUE actions at the local level – by cities, water suppliers, and farmers.
  - Use state and federal grants to help local entities implement WUE practices that are not locally cost effective but still contribute to California Bay-Delta objectives.
  - Use state low interest loans to help local entities overcome financial barriers to WUE implementation.
  - Develop partnerships with local and regional entities to: (1) assess the costs, benefits, and feasibility of potential WUE projects; (2) determine the best approach to implement WUE actions; (3) effectively prepare grant and loan applications; and (4) comply with WUE reporting requirements (e.g. related to urban water conservation certification).

- **Water Recycling and Desalination Technical Assistance**
  - Provide technical assistance to help local entities overcome technical hurdles in water recycling and desalination projects.
  - Support scientific research, public awareness on water recycling production and use.

- Support development of water desalination technologies and implementation of water desalination projects.

- **Oversight and Coordination**
  - Provide guidance to WUE implementing agencies in interpreting the ROD.
  - Employ methods of informal communications, such as staff-level meetings and conference calls with agency staff for dissemination and exchange of information.
  - Engage in formal communications as necessary, such as reports to the California Bay-Delta Authority, the Bay-Delta Public Advisory Committee, and the WUE Subcommittee.

No inconsistencies or deficiencies in goals and objectives are reported. The Program Plan includes activities that achieve goals and objectives of the ROD.

Targets:

The Water Use Efficiency Program provides financial and technical support to enable local entities to conserve water in the urban and agricultural sectors and to recycle urban wastewater. These activities have the potential to increase useable water supplies, increase in-stream flows, and improve water quality.

The ROD called for completion of the WUE Year-4 Comprehensive Evaluation report (Report), a technical study that will estimate past and expected performance (costs and benefits) of water conservation and recycling activities in California. This evaluation is conducted by CBDA. The Year- 4 evaluation took longer than expected and the Report is scheduled for Year 5. This analysis will provide estimates of how much water can be conserved and recycled by 2007 and by 2030 under about five different funding levels. The study results were presented at the public workshops and WUE Subcommittee meetings for stakeholder comment. The Report discusses water conservation at different levels of investments. After this study is released in August 2005, the WUE Subcommittee under the Bay-Delta Public Advisory Committee will work with Bay-Delta Authority and Implementing Agency staff to recommend that appropriate level of conservation and recycling to be reflected in revised targets.

The estimates of water conservation performance in the ROD came with a specific caveat against being used as targets. As such, past WUE targets have focused on how many grant dollars have been awarded. The revised targets are expected to include volumetric (e.g. acre-feet of water conserved) as well as monetary components. Additionally, the revised targets will be divided among agricultural and urban conservation and recycling. Where possible the revised targets will be divided into contributions toward water supply (so-called “real water conservation”), in-stream flows, and water quality.

Performance Measures

Performance Measures – Progress and Planned Activities

Performance measures are intended to help determine progress toward reaching our stated goals. The WUE Program Element facilitates local water conservation and recycling actions that support CALFED water quality, water supply reliability, and ecosystem goals. As such, performance measures for the WUE Program seek to link the outcome of local conservation and recycling actions to progress toward these three CALFED goals. These measures are still work in progress and implementing agencies roles and responsibilities will be determined as the performance measure is fully developed.

Work to date on WUE Performance Measures has included foundational work on Quantifiable Objectives for agricultural water conservation, tracking of financial project inputs, and initial estimates of regional water conservation. More work needs to be done in articulating conceptual models of WUE activities that state the linkages between project objectives and CALFED goals.

Put simply, through the use of performance measures, the WUE element will seek to clearly state why water conservation and recycling projects are important to CALFED and whether they are effective.

The following is a description of progress to date and activities planned to develop the various components of Performance Measures. Although most WUE practitioners agree on a broad list of Metrics, their associated units and the CALFED Goals, there has been very little progress on most of the other components of WUE Performance Measures. In year 6 WUE science will address Indicators, Targets, Objectives and Conceptual Models.

Metrics: As Table 1 illustrates, Metrics are articulated for individual and grouped projects. In addition the associated units for each metric are given. Metrics are used to make statements about the direction and magnitude of the associated Indicator or for a given Target. Although a potential list of Metrics has been drafted, more work needs to be done to gain buy-in from the CALFED Science Program and WUE implementers at local, state, and federal agencies. The System-Wide Metrics in Table 1 are built using information from all that contribute to it. For example the volume of surface water diversions is collected for all diversions (agriculture and urban) in the Bay-Delta area whereas the element specific Metric only collects information from projects that they are involved in. A more complete list of WUE and System-Side Metrics and associated Indicators are expected to be produced through topic specific work teams (agriculture and urban/recycling) convened between February and June 2005.

Indicators: Explicit indicators have not been developed for the WUE element. However when Indicators are developed they will be statements of what is expected to change along with the direction of change. A probable Indicator is the decrease in diversions that result from a WUE project. In addition to expressing this Indicator on a project specific level it can also be expressed in aggregate by

river reach, river and system-wide. An initial set of indicators will be developed concurrently with Metrics between February and June 2005.

Conceptual Models: Conceptual Models have not been explicitly articulated for the WUE element although most of the WUE work is based on implicit conceptual models. When Conceptual Models are articulated they will illustrate how various Indicators are stitched together to show progress toward an Objective and how the Objective links to a CALFED Goal. For example with ecosystem restoration as a Goal and increased river flow with reduced water temperatures as objectives the Indicators of decrease in diversion and associated thermal benefit represent the contribution that WUE is making. For this example there are many other Indicators (storage's cold water pool, project operations, ecosystem program improvements to river bank etc) that must be included. An initial set of Conceptual Models will be developed during year 6 with completion set for June 2006.

Targets: The development of the Quantifiable Objectives and Ag. Assurances represent initial efforts at establishing Targets from a programmatic point. This initial effort needs to be refined so that the Quantifiable Objectives include a time component that states how much of a Quantifiable Objective can be achieved by a given date. Targets are the expected magnitude of change for a given Indicator. For example using the decrease in diversions as an Indicator the amount of desired change is the Target. Targets will be refined for agriculture, urban and recycling during year 6.

Assessment: Because of limited progress on Indicators, Targets and Conceptual Models no formal Assessment is expected until year 7. Through the completion of the ROD-specified WUE Comprehensive Review a set of informal Targets will be available. It is expected that this information will inform the development of definitive Targets. This analysis is expected to be completed by August 2005.

Please use the above terminology of performance measures and the associated program goals to fill in the following program performance data collection table. Indicators should be program relevant and should reflect the overall goals and objectives of the individual programs as well as CALFED.

Table 1. Metrics Associated with Program Performance

Metric	Units	Who is collecting data	Where is data housed?	Associated Indicator[2]	Associated Goal[1]
Project-Related Metrics					
Studies, Science, Education and Oversight and Coordination	Varies	TBD	TBD	TBD	ER, WQ, WSR
Volume of AG water conservation from rerouted flow	AF/yr	Grant recipients for individual projects & DWR for all projects	TBD	Decrease in diversions and return flows at project locations. Aggregated by region and statewide.	ER, WQ, WSR
Volume of AG water conservation from reduced irrecoverable loss	AF/yr	Grant recipients for individual projects & DWR for all projects		Decrease in demand at project locations. Aggregated by region and statewide.	WSR
Change in water quality from AG water conservation	varies	Grant recipients for individual projects & DWR for all projects		Decrease in constituent loading at project locations. Aggregated by region and statewide.	ER, WQ
Volume of URBAN water conservation from rerouted flow	AF/yr	Grant recipients for individual projects & DWR for all projects		Decrease in diversions and return flows at project locations. Aggregated by region and statewide.	ER, WQ, WSR
Volume of URBAN water conservation from reduced irrecoverable loss	AF/yr	Grant recipients for individual projects & DWR for all projects		Decrease in demand at project locations. Aggregated by region and statewide.	WSR
Change in water quality from URBAN water conservation	varies	Grant recipients for individual projects & DWR for all projects		Decrease in constituent loading at project locations. Aggregated by region and statewide.	ER, WQ
Volume of RECYCLED water conservation from irrecoverable losses.	AF/yr	Grant recipients for individual projects & DWR for all projects		Increase in the amount of recycle water generated at project locations. Aggregated by region and statewide.	WSR

[1] Indicators should help determine progress toward one of the four CALFED goals: Ecosystem Restoration (ER), Levee System Integrity (LS).
[2] The listed Indicators are samples, an initial set will be developed between February and June 2005.

System-Wide Metrics[3]					
Administrative ($, counts, type etc)	TBD	TBD	TBD	TBD	TBD
Volume of groundwater extracted	AF/mo	DWR through groundwater assessments		Water table level consistent with prediction (model)	WSR, WQ, ER
Volume of surface water diversions	AF/mo	Unknown		Improved accuracy of diversion baseline aggregated by basin and statewide.	WSR, WQ, ER
Volume of water deliveries	AF/mo	Unknown		Improved accuracy of delivery baseline aggregated by basin and statewide.	WSR, WQ, ER
Volume of water consumption (evapotranspiration)	AF/mo	DWR		Improved accuracy of water consumption baseline aggregated by basin and statewide.	WSR, WQ, ER
Volume of surface water return flow	AF/mo	Unknown		Improved accuracy of surface water return flow baseline aggregated by basin and statewide.	WSR, WQ, ER
Volume of per capita water use	g/c/d	Unknown		Improved accuracy of per capita baseline aggregated by basin and statewide.	WSR
Volume of water flowing to salt sinks	AF/mo	Unknown		Improved accuracy of water flowing to salt sinks baseline aggregated by basin and statewide.	WSR, WQ
Volume of water flowing through streams	AF/mo	Unknown		Baseline aggregated by basin and statewide.	

[3] System-Wide Metrics are based on input from WUE and other CALFED elements. At this time there is insufficient understanding of which elements are collecting portions of this metric. This will be addressed as part of the WUE Performance Measures process.

Accomplishments

Major accomplishments of CBDA and implementing agencies in Year 5 of the California Bay-Delta Program were in WUE Science and Monitoring, Water Measurement, Agricultural and Urban Water Conservation Technical Assistance, Agricultural and Urban Grants, Water Recycling Technical Assistance, and Oversight and Coordination. Year 5 is defined for state agencies as July 2004 through June 2005 and for federal agencies as October 2004 through September 2005. The accomplishments reported include activities that are projected to be completed by June 2005:

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Assurances, Science, Monitoring, and Evaluation
CBDA made progress in evaluating the future WUE costs and performance through development of the ROD specified Year 4 WUE Evaluation report. The Report will be released in August 2005.
Developed the Terms of Reference for the Water Management Science Board and recruited 16 members. First meeting was held in January 2005 where work teams on modeling, water use efficiency and water quality were formed. Led by CBDA with participation by Department of Water Resources (DWR), US Bureau of Reclamation (USBR), and State Water Resources Control Board (SWRCB).
Incorporated concepts from the Science Application Advisory Committee into the 2004 WUE Proposal Solicitation Package (PSP) to improve the monitoring and evaluation of WUE projects. SAAC is a committee to be formed by DWR to oversee application of science in WUE programs and projects. The committee membership consists of interested stakeholders and agency experts. Water conservation proposals received by DWR under the Proposition 50 grant PSP are reviewed by economic and science panels and science and economic scores are considered in calculating proposal's total score and ranking. Proposals are required to have a monitoring and assessment plan allowing for future assessment and evaluation of the effectiveness and benefits of CALFED funding of water conservation projects. Led by DWR with participation by USBR and CBDA.
DWR had anticipated holding two meetings of the Science Application Advisory Committee for review of funded projects, but due to delays in releasing the Grant Funding PSPs the SAAC meeting will be held in Year 6. To be led by DWR, with participation from CBDA, SWRCB, USBR and local entities.
In Year 4, CBDA published Final Report of the Independent Review Panel on Appropriate Measurement of Agricultural Water Use. CBDA staff also prepared Staff Definition of Appropriate Urban Water Use Measurement. These actions completed a ROD commitment. CBDA, assisted by implementing agencies, developed an Implementation Approach for implementing appropriate water use measurement an included descriptions of necessary legislation and administrative actions. The implementation Approach was developed in an open stakeholder processand was discussed at the WUE Subcommittee meetings. The Staff Proposal: Implementation Approach for Agricultural and Urban Water Use Measurement was approved by the Bay-Delta Authority at their April 2004 meeting (Resolution 04-04-01). In accordance with the Authority's direction, CBDA staff drafted legislation consistent with the Implementation Approach. The creation of this draft fulfilled a ROD commitment. . This ROD commitment was scheduled for completion during the 2003 legislative session but was delayed due to

process and staff resources. Led by CBDA with participation by DWR, NRCS and USBR.

Urban water conservation BMP certification will be discussed at the WUE Subcommittee meeting In February and funding has been made available from DWR's Proposition 50 to support further development of urban certification process.

Made progress on the development of WUE element performance measures, through review of on-going science activities including the incorporation of Quantifiable Objectives into agricultural water management plans, and participation in Water Management Science Board in January of 2005. Led Jointly by by DWR and CBDA with participation by USBR and SWRCB.

USBR developed user guides intended with estimation of benefits of projects in water use efficiency. Led by USBR with participation by DWR, NRCS and CBDA.

DWR provided for the proposal and implementation process be accessible to all agencies involved in water use efficiency activities and for incorporating more scientific measures into the program. DWR, SWRCB, USBR, CBDA, NRCS are participants in CBDA WUE Agency Team in reviewing and selecting the Proposition 50 water conservation and DWR, USBR, and DHS are participants in water desalination Agency Team reviewing and selecting proposals.

Water Conservation and Water Desalination and Recycling Loans and Grants

Proposal Solicitation Package was developed for DWR's Proposition 50 Chapter 7 funding. The eligible projects are agricultural and urban water conservation projects. The PSP was released for public comment and submitted to the WUE Subcommittee and BDPAC, and CBDA for endorsement. The PSP was released on November 15, 2004 and proposals were due by January 11, 2005. It is expected that funding awards will be announced during May, 2005. 174 proposals were received by DWR for review and selection. Originally this PSP was scheduled for release in 2003 but was delayed due to request for including private entities as eligible for funding for the program and budget approval delays. The funding for the Year 5 was re-appropriated from previous fiscal year. Led by DWR with participation by SWRCB, NRCS, USBR, CBDA.

Developed and released to public a Proposal Solicitation Package (PSP) for DWR's Water Desalination Grant Program. This Water Desalination Grant Program is implementing Chapter 6(a) of Proposition 50 (Water Code Section 79545(a)). The objective of this grant fund is to assist local public agencies with the development of local potable water supplies through brackish water and oceanwater desalination. This cycle of funding is worth $25 million. The PSP was released for public comment and submitted to the WUE Subcommittee and BDPAC, and CBDA for endorsement. Forty four proposals were received by January 18, 2005. Selection will be made by May 2005. Originally this PSP was scheduled for release in 2003 but was delayed due to budget approval delays. The funding for the Year 5 was re-appropriated from previous fiscal year. Led by DWR with participation from USBR, DHS and CBDA

In Fiscal Year 2004, USBR Southern California Area Office provided financial and technical assistance for water conservation, water recycling, and desalination. A total of $14.9 million was awarded for Title XVI projects. Approximately $1million was awarded for water conservation grants and cooperative agreements. Led by USBR.

SWRCB Water Conservation and Recycling Loans and Grants accomplishments for FY 2004-2005 are as follows:

a. For the period July 2004 through January 2005, as part of a grant to the WateReuse Foundation approved in 2003 for water recycling research, $255,000 were approved for 5 projects. Led by SWRCB.

b. For the period July 2004 through January 2005, approved 5 grants totaling $345,000 for facilities planning studies for water recycling projects using funds from Proposition 13 (2000 bond issue). Led by SWRCB.

c. Amended Water Recycling Funding Guidelines to include requirements for Proposition 50 (2002 bond issue) grant funding for construction of water recycling projects. Guidelines were released for public comment, workshops were held, and CBDA endorsed before adoption by the SWRCB. The Legislature has appropriated $42 million for water recycling projects. Adopted a Competitive Project List of potential water recycling projects and accepted funding applications in January 2005 for Category 1 projects which are those that benefit the Delta. Grant applications qualifying for Proposition 50 funding were reviewed and approved for construction of water recycling projects. Led by SWRCB.

Developed and provided a report for an on-farm WUE incentive program. This report was based on 6 regional meetings that were held to gather producers technical assistance and financial incentives needs. The report also included an evaluation of existing programs for on farm technical and financial incentives of key agencies. Original due date was May 2003; however changes on concept delayed delivery to April 2005. Led by Natural Resources Conservation Service (NRCS).

Activity: NRCS continues to implement the Environmental Quality Incentives Program (EQIP) (Category B), which provides cost share incentive payments to encourage installation of water conservation practices. Funding available in EQIP for on farm implementation is based on prior year estimates of EQIP practice cost share expenditures that complement CALFED WUE Agricultural Water Conservation goals. FY2005 estimate of $5,000,000 is based on FY2004 final estimated expenditures and FY2005 initial allocations

Led by Natural Resources Conservation Service (NRCS).

Water Conservation and Water Desalination and Recycling Technical Assistance

Continued progress in agricultural water management planning and implementation of efficient water management practices in partnership with the California Agricultural Water Management Council. Financial and technical support to the Agricultural Council through the Three-way Cooperative Agreement. Refined and developed a more user friendly and web-based Water Management Planning tool as well as refined and completed a Model Water Management Plan. Continued integration and incorporation of Quantifiable Objectives into Water Management Planning and Implementation process. Furthermore, through the cooperative agreement existing Net Benefit Analysis was refined and completed. Increased agricultural signatory membership. Agricultural Water Management Council staff met with several potential signatories, conducted meetings and workshops as their outreach activities. Agricultural Water Management Council started publication of "Best Management" newsletter. Continued administrative support to the Agricultural water Management Council. Prepared agricultural water use efficiency strategy for Water Plan Update. Led by DWR with participation by USBR and CBDA.

Provided technical assistance to the California Urban Water Conservation Council, provided staff support to the CBDA Urban Water Use Measurement Staff Work Group. Supported CUWCC to conduct workshops and presentations throughout California on using the *Guidebook for Implementation of Senate Bill 610 and Senate Bill* 221 to implement those bills. Continued to work with the California Urban Water Conservation Council on development of a guidebook for water suppliers preparation of the 2005 Urban Water Management Plans required by the Urban Water Management Planning Act. In cooperation with CUWCC held nine workshops statewide to assist water suppliers in preparation of Urban Water Management Plan. Also, worked on evapotranspiration controllers and published water use efficiency leaflets on landscape irrigation. Prepared urban water use efficiency strategy for the Water Plan update. Let by DWR.

Continued to provide technical, biophysical, and engineering-oriented knowledge on water recycling and desalination issues; conducted 9 workshops and meetings with technical presentations; responded to policy makers, legislators, and regulators on issues related to water recycling and desalination; responded to public questions and inquiries regarding water recycling and desalination permitting process; participated in the Southern California Water Recycling Project Initiative II; provided staffing and technical support to help implement the Recycled Water Task Force's recommendations; Participated in the preparation and the implementation of the California Desalination Task Force pursuant to AB 2717; participated in the California Water Plan Update processes by providing technical support related to water recycling and desalination; helped increase public awareness on the importance of water recycling issues and projects; improved the Water Recycling and Desalination Web site-www.owue.water.ca.gov/recycle. Participated in the Water Use Efficiency grant application reviews. Completed 4 research projects with local agencies and University of California Davis to fill in knowledge gap in optimizing the energy needs in the treatment and use of recycled water, final reports are being prepared. Published DWR water facts # 23 on Water Recycling. In collaboration with local water agency, published three technical papers on recycled water production and use. Led by DWR.

The Southern California Area Office has provided technical assistance to Long Beach Water Department for the Seawater Desalination Pilot Plant. Led by USBR.

The Southern California Area Office also spends about $1 million for water use efficiency activities. Led by USBR.

Monitored Two new Mobile Laboratories. Though still in their infancy, the two labs have conducted 23 pump tests and 60 irrigation system evaluations. Provided assistance to existing Mobile Laboratories to provide assistance outside their service area. The intent of these evaluations is to show agencies that do not currently have mobile laboratories the benefits of the labs and encourage them to establish their own labs. Led by DWR.

Develop Standard Criteria for or evaluating water management plans. Will be completed in 2005. Led by USBR.

Reprinted and disseminated several water use efficiency brochures, articles and published the Water Conservation News on a quarterly basis. Led by DWR.

Assisted local agricultural water agencies to install 3 new California Irrigation Management Information System (CIMIS) weather stations. Collected, processed, analyzed, and disseminated CIMIS data to the public through the CIMIS web page. Provided trouble-shooting and technical assistance in maintaining the system and resolve problems with DWR and cooperator owned CIMIS weather stations... Partnered with the University of California Cooperative Extension to conduct 11 workshops on irrigation scheduling and promoting CIMIS. Participated in several workshops throughout the state to inform the public about the CIMIS program, how to utilize CIMIS data, assist in agricultural and urban runoff reduction, and how to become a CIMIS cooperator. Managed 2 Proposition 13 ET controller workshops. Partnered with the CA Urban Water Conservation Council to promote and initiate the non-ideal site program. This program is designed to assist the urban water agencies with water management, runoff reduction, and best management practices (BMP) implementation. Contracted with University of California Davis to develop California ETo maps using remote sensing and spatial interpolation methods, updating daily, and to be made available to the public through the CIMIS web page. Released a new CIMIS web page to facilitate the increased demand for data, technical information, and water management tools. Began Beta testing new data acquisition platforms to provide more frequent CIMIS data updates. Reprinted new State ETo zone maps for distribution. Continued submitting publications to CATI, Water Conservation News, and a scientific paper to the ASCE Journal. Led by DWR.

Facilitated technical assistance to water suppliers and water users through the Water Conservation Field Services program (see Loans and Grants, above). Led by USBR.

Working with the Interagency Task Force to establish criteria for Refuge Water Management Plans. Regional Criteria were developed for evaluating Water Management Plans for the Sacramento River Contractors. Both criteria incorporated agricultural Quantifiable Objectives. Led by USBR.

Provided technical assistance to growers throughout the state for the adoption of new irrigation equipment and improved water management techniques. In addition, local contracts with four Resource Conservation Districts were signed to provide technical assistance on irrigation water management to recipients of incentive payments for sprinkler and micro-irrigation systems. Led by NRCS.

Oversight and Coordination
Provided guidance to WUE agencies in interpreting the ROD and facilitated communications. Convened the WUE Subcommittee to the BDPAC. Led by CBDA.

Tasks accomplished #

Description

The following ROD commitments were accomplished during year 5: creation and implementation of the Water Management Science Board, developed legislation to implement Appropriate Water Use Measurement, release of agricultural and urban WUE and desalination grant solicitation packages. Developed Water Recycling Funding Guidelines.

Tasks on schedule: #

Description

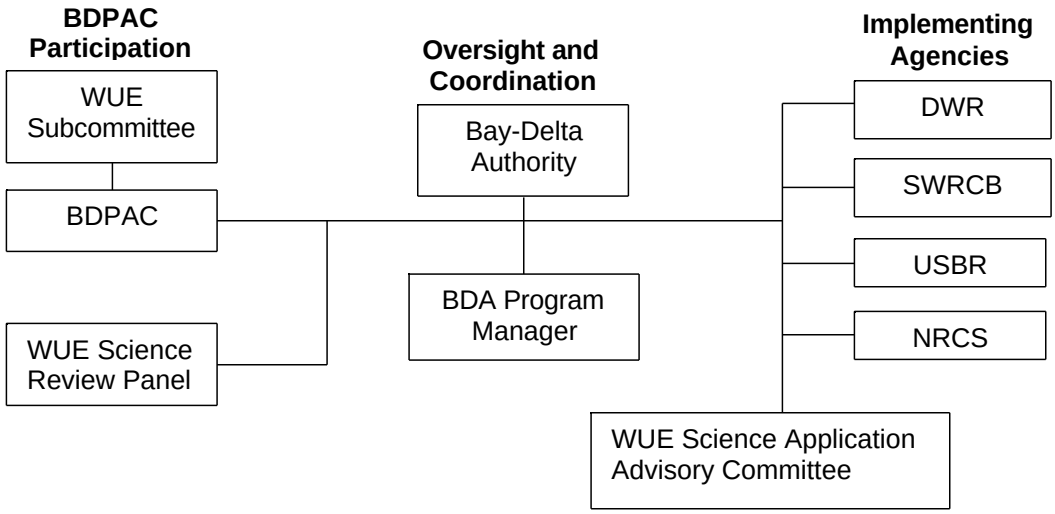
Agricultural and urban technical assistance, loans, grants, development of appropriate water use measurement strategy, Year 4 Comprehensive Evaluation, water recycling loans and grants, oversight and coordination.

Tasks behind schedule: #

Description

Urban BMP certification, water use measurement legislation, performance measures

Program Structure



Agency	Roles and Responsibilities
California Bay-Delta Authority	· Co-Lead agency on Science & Monitoring and Quantifiable Objectives · Lead agency on Water Measurement, Certification, and Oversight & Coordination · Convener of WUE Subcommittee and Water Management Science Board.
Department of Water Resources	· Co-Lead agency on Science & Monitoring and Quantifiable Objectives. · Lead agency on Agricultural Loans, Agricultural Grants, Urban Loans, Urban Grants, Agricultural Technical Assistance, Urban Technical Assistance, and Water Recycling Technical Assistance. · Convener of the WUE Science Application Advisory Committee.
U.S. Bureau of Reclamation	· Co-Lead agency on Science & Monitoring, Quantifiable Objectives, Agricultural Grants, Urban Grants, Agricultural Technical Assistance, Urban Technical Assistance, Water Recycling Grants, and Water Recycling Technical Assistance. · Lead agency on Managed Wetlands Grants and Managed Wetlands Technical Assistance.
State Water Resources Control Board	· Co-Lead agency on Science & Monitoring activities. · Lead agency on Water Recycling Loans, Water Recycling Grants, and Water Recycling Research Grants.
Natural Resources Conservation Service	· Co-Lead agency on farm agricultural Technical Assistance

Major Activities

CBDA and implementing agencies have a number of major activities underway. Some of these activities are required by the ROD and were identified in the WUE Implementation Program Plan. Major activities include DWR's continuing work on the water use efficiency and water desalination 2004 Proposition 50 Proposal Solicitation Package (PSP) and 2005 agricultural and urban WUE grant PSP, Water Desalination grant PSP, the SWRCB Proposal Solicitation Package and USBR funding for water recycling and water conservation and NRCS 's Environmental Quality Incentives Program (EQIP) (Category B) and other technical assistance for on-farm water management. Other major activities include the, implementation of the Recycled Water Task Force Report, practical application of science concepts, technical assistance to agricultural and urban water users, and CBDA oversight.

Assurances, Science, Monitoring, and Evaluation

Evaluate past and future WUE cost and performance. The primary deliverable for this activity is the completion of the ROD specified Comprehensive Evaluation of Year 4 WUE Evaluation. The results of this evaluation will be used by policy-makers to determine not only the continued level of funding for future WUE projects but for the future funding of other water management actions (such as surface storage) as well. ROD completion date was Dec 2004, new completion date is August 2005. Delays are due to staff resources. .Led by CBDA with participation by DWR, USBR, and SWRCB.

Funding:

Schedule: Completion Draft Report by August 2005

Activity:

Continue to follow the direction of the Bay-Delta Authority and assist implementing agencies in implementing the administrative actions call out in the Implementation Approach for water use measurement (CBDA Resolution 04-04-01). Also continue to work with the Governor's office and the Legislature to enact the legislative components of the Implementation Approach.

Led by CBDA with participation by DWR, SWRCB, NRCS, and USBR.

Funding:

Schedule: December 2005-06 and beyond.

Activities for implementing certification of urban water conservation BMP compliance have not been determined [as of 02/18/05].

Funding: DWR's funding is $20,000 per year

Activity: Periodically convene the WUE Science Application Advisory Committee to provide advice on conducting science and evaluation tasks. DWR anticipate that there will be meetings of SAAC in year 6 to review the DWR's WUE project funding process and discuss previously WUE-funded project results. DWR will incorporate science review in its PSP process and will continue to monitor the agricultural,

urban and water desalination projects results and analyze data. Led by DWR with participation by CBDA and USBR.

Funding: DWR's approximately $170,000 ($30,000 of Prop 50 in 05-06) in 05-06 and $140,000 per year.

Schedule: 2005-2006 and beyond

Activity: Facilitate the evaluation of programmatic performance of the WUE element by developing WUE performance measures, including quantitative goals for the WUE program and indicators of the progress towards achieving those goals. This includes the development, refinement, and evaluation of Quantifiable Objectives. Staff will also monitor the performance of WUE projects through credible methods that estimate the cost and performance of WUE projects. Performance may be measured by the volume of water conserved or recycled or through other qualitative or quantitative means. Led by CBDA with participation by DWR, USBR and SWRCB.

Funding: DWR's funding for performance measures is $52,000 ($12,000 of Proposition 50 in FY 05-06 and $40,000 GF /year beyond) and for QOs is $20,000 GF per year

Schedule: 2005-06 and beyond

Activity: Continue to strive for a balance between making the proposal and implementation process as accessible as possible to all agencies involved in water use efficiency and incorporating more scientific measures into the program. Funding ends in 2006-07 and activity will not continue thereafter. Led by DWR with participation by CBDA and USBR.

Funding: DWR's Proposition 50, approximately $50,000 per year. Funding ends in 2006-07.

Schedule: 2005-06 and 06-07

Activity: Convene the Water Management Science Board and affiliated work teams to provide independent scientific advice and review. Led by CBDA; participation by DWR, USBR, and SWRCB. This panel was convened in 2005.

Funding: DWR's funding is $30,000 ($10,000 of Proposition 50 and $20,000 GF) per year and $20,000 (ERPA) per year 2007-08 and beyond.

Schedule: 2005-06 and beyond

Water Conservation and Water Desalination and Recycling Loans and Grants

Activity: Continue to work on the 2004 WUE PSP including negotiating contracts with grantees and execution of contracts and contract management. Issue the Proposition 50 WUE PSP for 2005. The draft PSP will be released for public comment and a final draft prepared based on the comments. Agricultural and urban water use efficiency implementation as well as research and development projects are eligible for funding. The funding for FY 05-06 is about $34 million for both agriculture and urban projects at 50% each. Proposals will be reviewed and selected based on the criteria outlined in the PSP document. Draft PSP will be issued, workshops will be held for public comment and review and approval will be obtained from WUE Subcommittee and BDPAC and CBDA. Efforts will be made to include tribes and incorporate Environmental Justice in the development and implementation of the PSPs.

The original Budget Change Proposal indicated funding levels under Proposition 50 of approximately $34 million for both agriculture and urban projects each year for three years (split evenly between urban and agricultural projects). Grant funding ends in 2006-07 and program will discontinue unless new grant funds become available. The planned grant dollars are not sufficient to meet ROD objectives.

Led by DWR with participation by USBR, CBDA, NRCS, and SWRCB.

Funding: DWR's Proposition 50 funding, approximately $34 million in grants and $418,000 per year for agriculture and urban water conservation grant program administration in FY 05-06 and 06-07.

Schedule: Contracts issued by 2006 and 2007

Activity:

Continue to work on the 2004 Desalination PSP including negotiating contracts with grantees and execution of contracts and contract management. Develop a Proposal Solicitation Package for the Water Desalination funds under Chapter 6 (a) of the Proposition 50. In FY 05-06, $21.2 million funding including $250,000 for program administration is available for implementation of research and development for ocean water and brackish water desalination projects. A draft PSP will be released for public comment and will be submitted to WUE Subcommittee and BDPAC and CBDA for review And approval. Grant funding ends in 2005-06 and program will discontinue. The planned grant dollars are not sufficient to meet ROD WUE objectives.

Funding: $21.5 Million in Water Desalination grants and $284,000 for grant administration per year in FY 05-06

DWR will also use $280,000 of Proposition 204 for water recycling feasibility studies.

$249,000 per year for FY06-07 to 09-10 and $200,000 for 10-11 and $151,000 for 11-12.

Schedule: FY 05-06 and beyond.

SWRCB major activities for FY 2005-06 through FY 2008-09 are as follows:

a. Continue water recycling research projects. Led by SWRCB.

b. Continue administering grants and loans from Proposition 50, State Revolving Fund, 1984 Bond Law, and Proposition 13 (2000 bond issue) for planning and construction of water recycling projects. Under criteria in the CALFED Bay-Delta Program Programmatic Record of Decision, these programs are classified as Category B funding programs except for funds authorized by Proposition 50, which is a Category A funding source. Led by SWRCB, participation by CBDA for Proposition 50 funding.

Funding: The Legislature appropriated $42.2 million in FY 2003-04 from Proposition 50 for grants for construction of water recycling projects. Loan repayments from previous loans under the 1984, 1988, 1996 and 2000 (Proposition 13) Bond Laws are available to continue loans and grants for planning and construction of water recycling projects. The State Revolving Fund can be used for water recycling projects, but there is no set allocation for this purpose. Proposition 13 funds under existing contract will be administered for additional research proposals. A small amount of additional research funds will become available from loan repayments.

Schedule: Ongoing.

Activity: Revise Refuge Water Management Plan Criteria. Led by USBR with participation by CBDA.

Funding: Under development

Schedule: Under development

Activity: NRCS completed a Final Report for the CALFED WUE on-farm incentive program which was presented to the partner agencies and WUE subcommittee for their review and refinement. Anticipated products from the review range from accelerated funding and increased coordination for existing programs to development of a new state funded program for on farm financial incentives.

Funding: As available

Schedule: As scheduled for WUE Subcommittee and interagency review.

Activity: NRCS continues to implement the Environmental Quality Incentives Program (EQIP) (Category B), which provides cost share incentive payments to encourage installation of water conservation practices. Funding available in EQIP for on farm implementation is based on prior year estimates of EQIP practice cost share expenditures that complemented CALFED WUE Agricultural Water Conservation goals. FY2006-FY2007 estimate is based on FY2004 final estimated expenditures and FY2005 initial allocations. No estimate is provided for beyond FY2007 because the 2002 Farm bill will be up for reauthorization in FY2007.

Funding: $5,000,000

Schedule: Annual Budget Authorization by Congress

Activity: Develop a cost/benefit tracking system for all SWRCB-funded water recycling projects on a Geographical Information System (GIS) data layer to demonstrate quantity of recycled water delivered and quantity of State and local water augmented due to the delivery of recycled water. A project tracking database has been developed to incorporate administrative data, including some factors useful to document water recycling projects. A GIS viewer has been developed that will allow data layers to be added on water recycling projects when location data are available. Water recycling project data need to be added to the project tracking database and additional data tracking needs to be developed to incorporate project performance data.

Funding: Administration funds for the State Revolving Fund and from various bond issues.

Schedule: Ongoing

Activity: In Federal Fiscal Year 2004 - Reclamation's Southern California Area Office, award $14.9 million in Title XVI Grants. In Federal Fiscal Year 2005 - it is expected that the Southern California Area Office will award $10.5 million in Title XVI Programs. In Fiscal Year 2006, the President's Budget indicates a total of $8.5 million will be spent towards recycling programs in southern California. In Fiscal Year (FY) 2006, USBR's Mid-Pacific Region water conservation staff is expected to award grants in contracts and grants for agricultural and urban water conservation Title XVI funding for MP Region for FY 04 is under development.

Funding: under development

Schedule: Ongoing.

Water Conservation and Water Desalination and Recycling Technical Assistance

Activity: Review urban water management plans and work with the CUWCC to complete the following activities:

- Evaluate and research potential BMP's
- Develop protocol for estimating environmental benefit of BMP implementation
- Review about 400 Urban Water Management Plans and provide technical assistance

Funding:$963,000 per year

Schedule: Ongoing

Activity: Provide ongoing assistance to agricultural water suppliers by providing information to implement efficient water management practices and help local agencies in their efforts to prepare Water Management Plans through Agricultural Water Management Council and by providing brochures, bulletins, and holding workshops. Review Agricultural Water Management Plans. Operate and maintain over 125 California Irrigation Management Information System stations statewide and disseminate data to the public. These activities would require some level of additional funding. Led by DWR.

Funding: $1,648,000 per year

Schedule: Ongoing

Activity: Continue collaborating with the University of California, US Department of Agriculture – Agricultural Research Service (USDA – ARS) , the Irrigation Training and Research Center (ITRC) at California State Polytechnic University, San Luis Obispo and other research institutions to further our understanding of key WUE technologies through encouraging development of such technologies. Led by DWR.

Funding:$50,000 per year

Schedule: Ongoing

Water Recycling Technical Assistance

Continue to provide technical, biophysical, and engineering-oriented knowledge on water recycling. In collaboration with stakeholders, initiate efforts to:

- Develop guidelines for water recycling regulation and permitting requirements.
- Identify potential water recycling projects.
- Develop user friendly water quality guidelines for recycled water use in agriculture.
- Help implement the Recycled Water Task Force's recommendations.
- Inform policy makers, legislators, and regulators of water recycling opportunities and impediments.
- Increase public awareness and disseminate knowledge and information on the safe use of recycled water through research, publications and participation in technical and outreach meetings.
- Coordinate with federal, State, and local agencies to advance local and regional water recycling.
- Publish technical appears and articles in the WCN on water recycling.

Water Desalination Technical Assistance

Continue to provide technical, biophysical, and engineering-oriented knowledge on water desalination. In collaboration with stakeholders, initiate efforts to:

- Develop guidelines for water desalination regulation and permitting requirements.
- Identify potential water desalination projects.
- Develop user friendly planning guidelines for desalination projects.
- Help implement the Desalination Task Force's recommendations.
- Inform policy makers, legislators, and regulators of desalination opportunities and impediments.
- Increase public awareness and disseminate knowledge and information on technical advancements on desalination technologies.
- Coordinate with federal, State, and local agencies to advance local and regional water desalination.
- Publish articles in the WCN about desalination.

Funding: $367,000 for technical assistance per year in 05-06 ($228,000 of Prop 50, 120,000 of Prop 204, and $19,000 of Prop 50 Desalination) and $120,000 per year (Prop 204) beyond.

Schedule: FY 05-06.and beyond

Activity: Through the Water Conservation Field Services Program (WCFSP), USBR will provide technical assistance to its agricultural and urban contractors. These efforts can be seen through agreements with California Polytechnic State University San Luis Obispo's Irrigation Training and Research Center, California Farm Water Coalition, Fresno State Center for Irrigation Technology, Universities of California-Riverside, California State Universities San Bernardino and Chico, and the Water Education Foundation's Project Water Education for Teachers. Led by USBR.

Funding: under planning

Schedule: Ongoing

Activity: Continue to provide technical assistance to producers throughout the state for the adoption of new and improved water management techniques. Led by NRCS.

Funding: as available.

Schedule: Ongoing

Oversight and Coordination

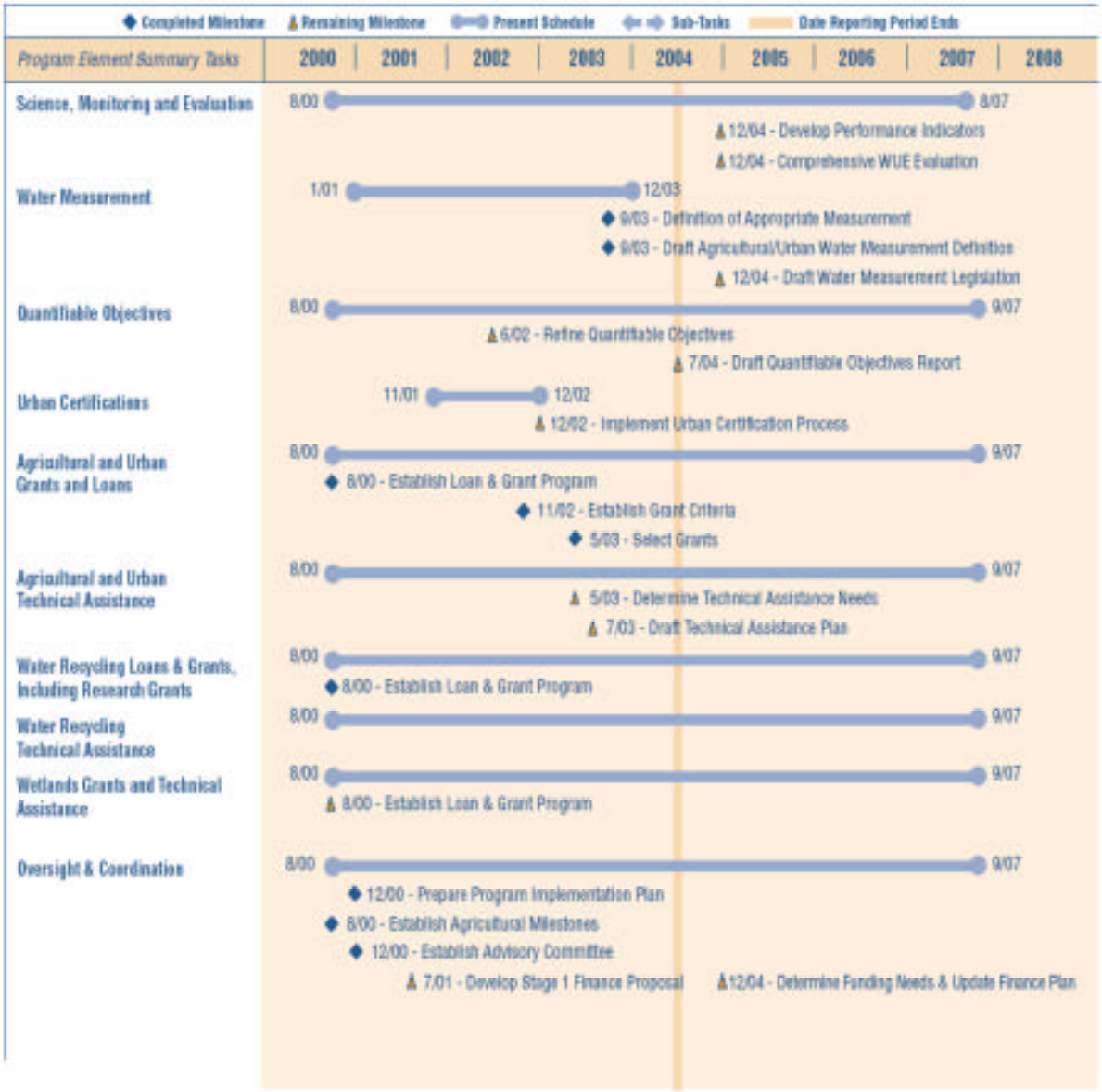
Activity: Continue to convene WUE Subcommittee and Water Management Science Board meetings. Continue to provide guidance in interpreting the ROD to participating agencies to meet the goals and objectives of the WUE program. Led by CBDA.

Funding:

Schedule: Ongoing

Schedule

To be updated



Public Involvement and Outreach *(1-2 pages)*

The Year 4 Comprehensive Evaluation report will be released as a draft and a final draft in year 5. Comments and information received and incorporated where appropriate.

An open process was used to solicit input for DWR's Proposition 50 WUE and desalination PSP. Input included releasing the draft criteria for public comment and workshops.

All planning and implementation tasks including water use measurement, Year 4 Comprehensive Evaluation, urban certification, performance measures and PSP involve public involvement through holding public workshops and workgroups and presentation at the WUE Subcommittee and BDFPAC, and CBDA meetings. CBDA and implementing agencies will continue to adhere to public participation process, as applicable.

DWR's PSP process involves adequate public notice and pubic workshops in various parts of the State and PSP release and project selection is publicized by press release. Proposal selection is done through stakeholder involvement including their participation in proposal review. A draft listing of projects awarded funding will be brought to the April 2005 BDPAC and CBDA joint meeting.

CALFED agencies and CBDA are welcome to actively participate in the NRCS State Technical Advisory Committee to advise the State Conservationist on technical and other programmatic needs. The State Technical Advisory has nearly 300 members representing a broad cross section of agencies, producer groups, tribes, and other interested parties.

SWRCB encouraged public comment on its draft amendment of the Water Recycling Funding Program Guidelines and its draft Competitive Project List of Proposition 50 funding applications for water recycling projects. Public meetings were held for receipt of public comments on draft documents. Staff met with potential applicants and attended public meetings to explain program requirements for prospective applicants.

Integrating Science, Environmental Justice, and Tribal Relations Programs

The CALFED Record of Decision (ROD) recognized that there are significant overlaps between California Bay-Delta Program Elements and called for an integrated approach to addressing Program goals. Program managers have met to discuss, and will continue to work together to implement a coordinated scientific integration process.

The WUE element is integrated with Ecosystem Restoration and Water Quality through the Quantifiable Objectives. The Quantifiable Objectives provide a first-order estimate of the WUE potential that irrigated agriculture can make toward in-stream flow and timing needs of the anadramous fish restoration goals. There is also a identification of where there are constituents of concern and irrigated agriculture.

Integration with Storage occurs through the Common Assumptions effort. The year 4 Comprehensive Review is providing surface storage investigators with conservation quantities and recoverable flows that can address their modeling objectives.

Science:

Workshops were held to review modeling used for the Year 4 Comprehensive Evaluation.

In the past the WUE element has not used a formal process to incorporate science into the practices that are implemented. In Year 5 WUE PSP relied on science and economic peer review and coordination with CBDA consultants. DWR in coordination with CBDA WUE program staff have developed a protocol to apply science in implementation of DWR Proposition 50 agricultural and urban water conservation grant program. DWR developed guidelines for the 2004 PSP which requires applicants to apply science in the development of their proposals and applications are reviewed for scientific merit, technical feasibility, test of assumptions, and costs and benefits. DWR has economic, science and technical review panels for its grant funding programs. Stakeholders are participating in the review of proposals. DWR's technical assistance program for recycling, desalination, and water conservation also utilize peer review process. DWR staff will continue to coordinates its science and economic evaluation of Proposition 50 projects within DWR with CBDA.

In year 6 it is anticipated that the Water Management Science Board along with its associated WUE work team will take a more active role in peer review, address unknowns, performance assessment and planning. The WMSB convened in 2005 will provide overarching review and coordination of program strategies, plans, and specific issues of strategic importance for program elements that contribute to water supply reliability. WUE is one of the program elements.

The Authority and BDPAC have indicated keen interest in Performance Measures for the 11 program elements. The science program has been working with the other program elements to create performance measures. Performance measures translate program goals and objectives into measurable benchmarks of success. Performance measures range from relatively simple metrics

(such as project expenditures) to complex cross program assessments (such as water supply reliability). As such, current work on Performance Measures includes counting the simple metrics and laying the technical and scientific groundwork that will allow us to perform more complex assessments later. The Performance Measures outlined in this Plan will be further discussed at the WUE Subcommittee and the PM work groups and the roles and responsibilities will be determined.

NRCS is a science based agency with an interdisciplinary approach to natural resource conservation. NRCS welcomes and accepts peer involvement through the State Technical Guide Committee which has numerous sub-committees dealing with emerging issues in resource conservation.

Environmental Justice:

WUE was the first CBDA Program to consider and incorporate EJ perspectives in the PSP process. This process was shared with the State Water Resources Control Board in the implementation of a PSP, and continues to guide WUE's EJ commitments. WUE will also undertake more interaction and coordination between WUE and EJ subcommittees. DWR incorporated EJ perspective in its 2004 Water Desalination and WUE PSPs by allowing no local cost share for disadvantaged communities. DWR has and will continue to take steps in reaching to such communities when holding workshops on grants and technical assistance programs. The SWRCB gave priority funding preference to disadvantaged communities (as defined by average household income) in the allocation of Proposition 50 funding for water recycling projects. Staff continues to work with the EJ Coordinator and the Subcommittee is striving to conduct the following activities:

- Integrate Environmental Justice principles and relevant EJ work plan tasks into the multi-year program plan.
- Continue to ensure integration of Environmental Justice goals and objectives into the WUE Subcommittee's activities.
- The WUE Subcommittee chair(s) and/or Program Manager will attend Environmental Justice Subcommittee meetings, as appropriate, based on the agenda.
- Include EJ community representatives in future grant and loan selection committees.
- Continue to include EJ criteria in proposal solicitation and selection criteria.

  Strive to have at least one joint meeting of the WUE and EJ Subcommittee each year.
- Coordinate with EJ Subcommittee to conduct technical assistance workshops in minority and low income communities to advertise Proposal Solicitation Packages and facilitate proposal submissions from a wider and more diverse population.

Tribal Relations:

The following items should help foster more meaningful tribal input and participation on issues or concerns of the tribes.

- Tribal Water Programs (Clean Water Act 106, 319H, etc.)
  Majority of California Tribes have developed USEPA Tribal Environmental Programs that have extensive water protection, water conservation and water quality programs that should be taken into consideration during Water Use Efficiency project planning and implementation.

- Tribal Rep's on BDPAC advisory committee
  The tribes have been involved with CALFED for a number of years. There are currently two tribal BDPAC members. The input of these members serving on the BDPAC should be made available to all tribes with the assistance of the CBDA's Tribal Coordinator.

- Grant opportunities/educational outreach

  Agencies through Tribal Coordinator will notify tribal governments of grant opportunities that provide water-use efficiency. CBDA Tribal coordinator in coordination with DWR, SWRCB, and USBR held local workshops for tribes in four locations throughout the State. These workshops were designed to inform tribes about water conservation, water desalination, and other funding programs. Agencies will continue to hold workshops or make efforts to ensure tribal participation in workshops for the its future PSPs. The first NRCS CA Tribal Summit was held in Sacramento February 24, 2004. Seventeen different tribal representatives met to hear about technical and other services available from NRCS. After seeing a presentation on technical and financial assistant programs, tribal representatives met directly with Assistants STCs for Field Operations to schedule site visits and begin the conservation planning process with NRCS. Tribal participants heard from CALFED representatives on February 25, the second day of the interactive workshop. Additional workshops will be held if needed. Partners: Cortina Rancheria and Tribal CALFED.

Cross-Program Relationships

WUE cross-program integration begins with the program elements' objectives. WUE objectives tier from the California Bay-Delta Program's water supply reliability, water quality, and ecosystem restoration. Consistent with this approach, the WUE element continues to coordinate with the following programs:

Ecosystem Restoration – Staff continues to coordinate with the ERP as needed. This includes meetings with State and Federal agencies, the California Water Plan, and interested stakeholders to develop uniform data collection and reporting procedures. In addition coordination between ERP and WUE is important for updating Quantifiable Objectives for in-stream flow and water quality objectives. The agricultural element of WUE is coordinating with the Environmental Water Program to pursue in-stream flow benefits on Deer Creek.

Storage, and Conveyance – Staff continues to coordinate with the surface storage investigations, Conveyance, and Conjunctive Use elements as needed. This includes meetings with State and Federal agencies, the California Water Plan, and interested stakeholders to develop uniform data collection and reporting procedures. A specific ongoing effort with the Storage Element is participation in Common Assumptions.

Drinking Water Quality – Staff continues to coordinate with the Drinking Water Quality Program as needed. This includes meetings with State and Federal agencies, the California Water Plan, and interested stakeholders to develop uniform data collection and reporting procedures. In addition coordination between DWQ and WUE is important for the updating Quantifiable Objectives for water quality objectives.

Environmental Water Account- In addition to water savings, implementation of efficiency measures may provide water quality and flow timing benefits. CALFED has identified a set of Quantifiable Objectives – numeric targets of water savings, water quality and flow timing benefits – to meet CALFED goals. Water quality and timing benefits may be local, regional, and/or statewide and could benefit EWA objectives of protecting at-risk fish. Staff continues to coordinate with the EWA as needed to establish possible benefits from implementation of WUE to EWA. This includes meetings with involved agencies and stakeholders to communicate and consider the EWA and WUE objectives and goals in planning, data collection, program implementation and evaluation.

Transfer- Water transfer can provide financial assistance to support implementation of water use efficiency measures. The WUE Program will coordinate with Water Transfer. DWR's Water Use Efficiency and Water Transfers Program are now managed in a single office, Office of Water Efficiency and Transfers. This reorganization is expected to improve program efficiency.

Watershed- WUE program will collaborate with Watershed Program to support implementation of water use efficiency programs and projects in various watersheds of interest to both programs.

Note: The following Funding Tables are based on the 10-Year Finance Plan and are not based on implementing agencies planned budget reported in the Major Activities section. At the time this draft was prepared agency staff didn't have a chance to review the Funding Tables and its background budget details to ensure consistency with agency planned budgets. That is expected in the next draft.

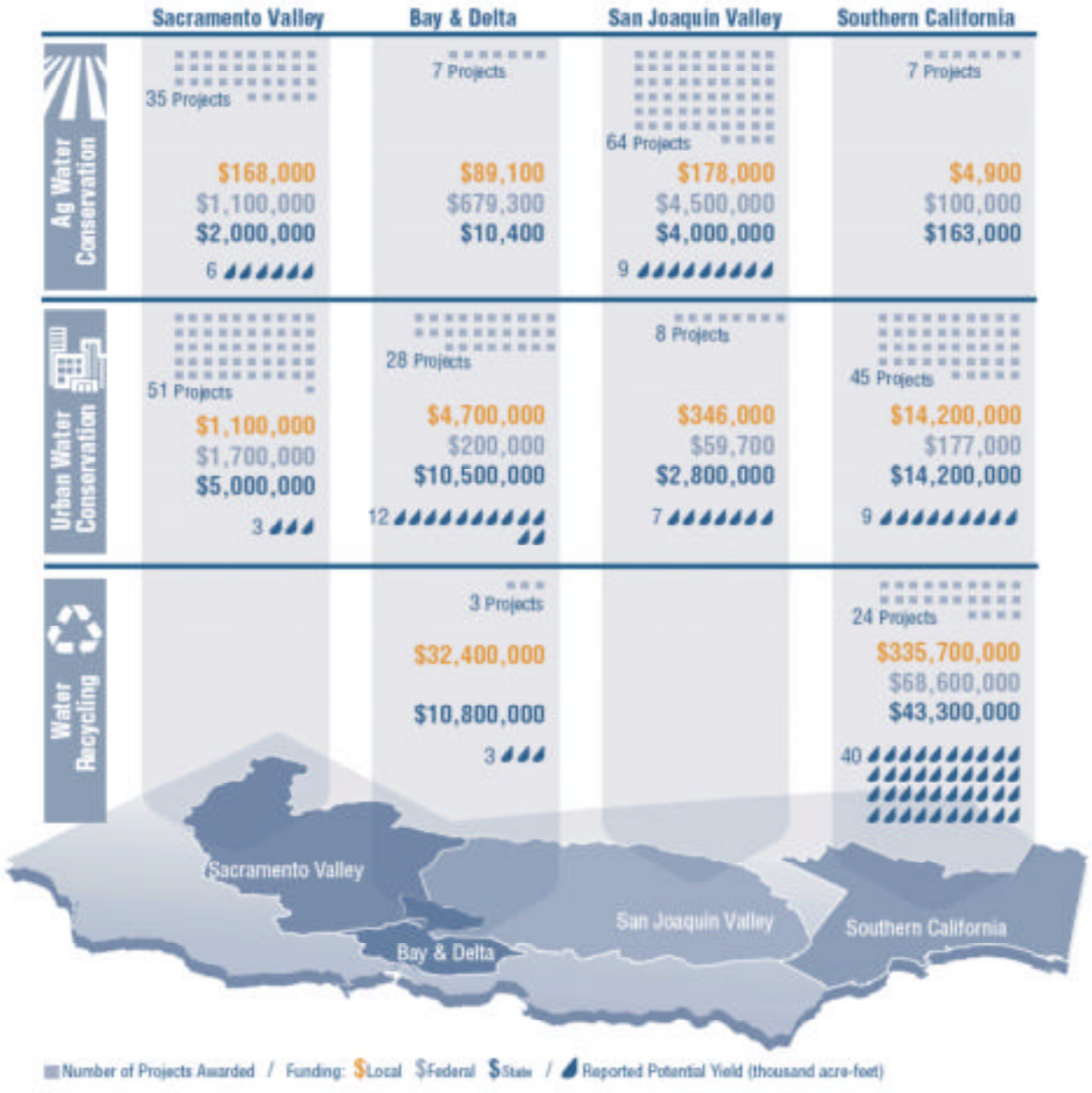
Funding Tables:

Water Use Efficiency ($ in millions)	**Yr 6**	**Yr 7**	**Yr 8**	**Yr 9**	**Total**
State	$59.7	$51.8	$44.9	$19.4	**$175.8**
Federal	$14.7				**$14.7**
Local	$103.0	$88.0	$81.0	$18.5	**$290.5**
Water User					**$0.0**
Available Funding Total	**$177.4**	**$139.8**	**$125.9**	**$37.9**	**$481.0**
Finance Plan Targets	$305.3	$325.3	$325.3	$325.3	$1,281.2
Unmet Needs	$127.9	$185.5	$199.4	$287.4	$800.2

Water Use Efficiency ($ in millions)	**Yr 6**	**Yr 7**	**Yr 8**	**Yr 9**	**Total**
Urban Conservation Projects	$25.0	$25.0	$25.0	$11.8	$86.8
Loans					
Grants					
Agricultural Conservation Projects	$16.7	$16.6	$16.7	$16.7	$66.7
Loans					
Grants					
Water Recycling	$75.1	$75.1	$75.1	$6.4	$231.7
Loans					
Grants					
Research Grants					
Desalination Implementation	$20.0				$20.0
Desalination Research	$20.0	$20.0	$6.0		$46.0
Technical Assistance, Science, Oversight and Coordination	$6.0	$3.1	$3.1	$3.1	$15.3
Agricultural Technical Assistance					
Recycling Technical Assistance					
Urban Technical Assistance					
Managed Wetlands Technical Assistance					
Urban Certifications					
Science & Monitoring					
Water Measurement					
Quantifiable Objectives					
Available Funding Total	**$162.8**	**$139.8**	**$125.9**	**$38.0**	**$466.5**
Finance Plan Targets	$305.3	$325.3	$325.3	$325.3	$1,281.2
Unmet Needs	$142.5	$185.5	$199.4	$287.3	$814.7

Geographical Distribution of Activities (to be updated)

Geographical Distribution of Projects



Water Use Efficiency

Sum of ($ in millions)

Fund Group	Element Task	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
California Bay-Delta Authority		**$ 12.60**	**$ 2.43**	**$ 1.20**	**$ 0.38**	**$ 0.33**	**$ 0.33**
General Fund	Science & Monitoring	$ 0.18	$ 0.86	$ 0.54			
	Water Measurement	$ 0.10	$ 0.19	$ 0.12			
	Quantifiable Objectives	$ 0.05	$ 0.10	$ 0.06			
	Urban Certifications	$ 0.05	$ 0.19	$ 0.12			
	Agricultural Grants	$ 5.92	$ 0.26				
	Urban Grants	$ 5.88	$ 0.26				
	Oversight & Coordination	$ 0.43	$ 0.57	$ 0.36	$ 0.38	$ 0.33	$ 0.33
General Fund Total		$ 12.60	$ 2.43	$ 1.20	$ 0.38	$ 0.33	$ 0.33
State Water Resources Control Board		**$ 3.31**	**$ 27.10**	**$ 11.90**	**$ 5.72**	**$ 22.57**	**$ 0.71**
Prop 13	Recycling		$ 27.10				
	Water Recycling Grants	$ 3.31		$ 2.96	$ 5.60	$ 21.69	
Prop 13 Total		$ 3.31	$ 27.10	$ 2.96	$ 5.60	$ 21.69	
Prop 50	Water Recycling Grants			$ 8.94	$ 0.12	$ 0.88	$ 0.71
Prop 50 Total				$ 8.94	$ 0.12	$ 0.88	$ 0.71
Department Of Water Resources		**$ 4.18**	**$ 16.80**	**$ 22.46**	**$ 47.28**	**$ 12.03**	**$ 46.18**
General Fund	Science & Monitoring				$ 0.03		$ 0.07
	Agricultural Technical Assistance	$ 0.99	$ 0.90	$ 0.90	$ 1.00	$ 0.84	$ 0.95
	Urban Technical Assistance	$ 0.21	$ 4.44	$ 0.40	$ 0.38	$ 0.30	$ 0.10
General Fund Total		$ 1.20	$ 5.34	$ 1.30	$ 1.41	$ 1.13	$ 1.13
Prop 13	Agricultural Loans				$ 9.12	$ 8.08	$ 8.44
	Agricultural Grants	$ 0.56	$ 0.86	$ 0.22			
	Urban Grants	$ 0.78	$ 9.02	$ 18.27	$ 0.19	$ 0.20	
Prop 13 Total		$ 1.34	$ 9.88	$ 18.49	$ 9.31	$ 8.28	$ 8.44
Prop 50	Science & Monitoring				$ 1.88		$ 1.80
	Agricultural Grants			$ 0.50	$ 15.53		$ 14.98
	Urban Grants			$ 0.50	$ 15.53		$ 14.98
	Agricultural Technical Assistance				$ 0.96	$ 0.29	$ 1.37
	Urban Technical Assistance				$ 0.96	$ 0.29	$ 1.37
	Water Recycling Technical Assistance					$ 0.29	$ 0.33
Prop 50 Total				$ 1.00	$ 34.86	$ 0.86	$ 34.82
Other State	Science & Monitoring				$ 0.04	$ 0.07	$ 0.09
	Quantifiable Objectives				$ 0.04	$ 0.07	$ 0.09
	Agricultural Technical Assistance	$ 0.64	$ 0.59	$ 0.78	$ 0.85	$ 0.81	$ 0.85
	Urban Technical Assistance	$ 1.01	$ 0.98	$ 0.89	$ 0.77	$ 0.80	$ 0.77
Other State Total		$ 1.64	$ 1.58	$ 1.68	$ 1.70	$ 1.75	$ 1.79
Total		$ 20.09	$ 46.33	$ 35.55	$ 53.37	$ 34.93	$ 47.22

CALFED Bay-Delta Program | **Cross-cut Funding January, 2005** | **Report Date: January 24, 2005**

U S Bureau Of Reclamation		**$ 25.30**	**$ 25.47**	**$ 16.23**	**$ 19.05**	**$ 15.72**						
	USBR, W&RR	Science & Monitoring		$ 0.19								
		Agricultural Grants	$ 0.96	$ 0.95	$ 0.54	$ 0.68	$ 0.96					
		Urban Grants	$ 0.96	$ 0.95	$ 0.54	$ 0.68	$ 0.96					
		Water Recycling Grants	$ 23.39	$ 23.38	$ 15.15	$ 17.70	$ 13.80					
	USBR, W&RR Total		$ 25.30	$ 25.47	$ 16.23	$ 19.05	$ 15.72					
al Total			$ 25.30	$ 25.47	$ 16.23	$ 19.05	$ 15.72					
Los Angeles Area Water Reclamation and Reuse		**$ 17.99**	**$ 16.18**	**$ 7.16**								
	Local Match	Water Recycling Grants	$ 17.99	$ 16.18	$ 7.16							
	Local Match Total		$ 17.99	$ 16.18	$ 7.16							
Long Beach Desalination			**$ 0.12**	**$ 0.58**	**$ 3.74**	**$ 0.95**						
	Local Match	Water Recycling Grants		$ 0.12	$ 0.58	$ 3.74	$ 0.95					
	Local Match Total			$ 0.12	$ 0.58	$ 3.74	$ 0.95					
Mission Basin Brakish Ground Water		**$ 2.55**	**$ 1.60**		**$ 1.65**	**$ 3.54**						
	Local Match	Water Recycling Grants	$ 2.55	$ 1.60		$ 1.65	$ 3.54					
	Local Match Total		$ 2.55	$ 1.60		$ 1.65	$ 3.54					
Pasadena			**$ 0.08**	**$ 0.09**	**$ 0.53**	**$ 0.48**						
	Local Match	Water Recycling Grants		$ 0.08	$ 0.09	$ 0.53	$ 0.48					
	Local Match Total			$ 0.08	$ 0.09	$ 0.53	$ 0.48					
Various			**$ 1.22**	**$ 11.00**								
	Local Match	Agricultural Grants		$ 0.61	$ 5.50							
		Urban Grants		$ 0.61	$ 5.50							
	Local Match Total			$ 1.22	$ 11.00							
Calleguas Municipal Water District Recycling Project		**$ 2.51**	**$ 3.43**	**$ 4.41**	**$ 8.84**	**$ 8.67**						
	Local Match	Water Recycling Grants	$ 2.51	$ 3.43	$ 4.41	$ 8.84	$ 8.67					
	Local Match Total		$ 2.51	$ 3.43	$ 4.41	$ 8.84	$ 8.67					
Long Beach Area Recycling Project		**$ 1.31**	**$ 8.61**	**$ 6.09**	**$ 2.10**	**$ 0.63**						
	Local Match	Water Recycling Grants	$ 1.31	$ 8.61	$ 6.09	$ 2.10	$ 0.63					
	Local Match Total		$ 1.31	$ 8.61	$ 6.09	$ 2.10	$ 0.63					
North San Diego Recycling Project			**$ 7.91**	**$ 5.84**	**$ 4.42**							
	Local Match	Water Recycling Grants		$ 7.91	$ 5.84	$ 4.42						
	Local Match Total			$ 7.91	$ 5.84	$ 4.42						
Orange County Regional Water Reclamation Project		**$ 8.61**	**$ 15.60**	**$ 22.02**	**$ 82.02**	**$ 111.84**						
	Local Match	Water Recycling Grants					$ 111.84					
		Water Recycling Grants	$ 8.61	$ 15.60	$ 22.02	$ 82.02						
	Local Match Total		$ 8.61	$ 15.60	$ 22.02	$ 82.02	$ 111.84					
San Diego Area Reclamation		**$ 25.78**	**$ 12.44**	**$ 9.98**	**$ 37.10**	**$ 39.22**						
	Local Match	Water Recycling Grants	$ 25.78	$ 12.44	$ 9.98	$ 37.10	$ 39.22					
	Local Match Total		$ 25.78	$ 12.44	$ 9.98	$ 37.10	$ 39.22					
San Gabriel Basin Project		**$ 3.29**	**$ 7.65**	**$ 5.74**	**$ 19.98**	**$ 16.37**						
	Local Match	Water Recycling Grants	$ 3.29	$ 7.65	$ 5.74	$ 19.98	$ 16.37					
	Local Match Total		$ 3.29	$ 7.65	$ 5.74	$ 19.98	$ 16.37					
tch Total			$ 62.05	$ 74.84	$ 72.91	$ 160.38	$ 181.70					
d Total			$ 107.44	$ 146.64	$ 124.68	$ 232.80	$ 232.34	$	47.22			